

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

19

REQUEST FOR ACCESS TO AN APPLICATION UNDER 37 CFR 1.14(e)

In re Application of <u>Campbell</u>	
Application Number <u>09/1371.776</u>	Filed <u>8/10/99</u>
Art Unit	Examiner

Power
to
Inspect
R.C.
9/4/02Assistant Commissioner for Patents
Washington, DC 20231

Paper No. _____

TELEPHONY CENTER 3600
RECEIVED
02 SEP -4 AM 10:31

1. I hereby request access under 37 CFR 1.14(e)(2) to the application file record of the above-identified ABANDONED Application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and is: (CHECK ONE)
- (A) referred to in:
 United States Patent Application Publication No. _____, page _____, line _____,
 United States Patent Number 6412811, column _____, line _____, or
 an International Application which was filed on or after November 29, 2000 and which designates the United States, WIPO Pub. No. _____, page _____, line _____.
- (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11(b) or 1.14(e)(2)(i), i.e., Application No. _____, paper No. _____, page _____, line _____.
2. I hereby request access under 37 CFR 1.14(e)(1) to an application in which the applicant has filed an authorization to lay open the complete application to the public.

Anne Murphy
Signature9/3/02

Date

Anne Murphy
Typed or printed name

FOR PTO USE ONLY	
Approved by: _____	(initials) _____
Unit: _____	



US006412811B1

(12) **United States Patent**
Campbell et al.

(10) Patent No.: US 6,412,811 B1
(45) Date of Patent: *Jul. 2, 2002

(54) INFLATOR

(75) Inventors: Douglas P. Campbell, Metamora, MI (US); Ahmad K. Al-Amin, Higley, AZ (US); Timothy A. Swann; Roy D. Van Wynsberghe, both of Mesa, AZ (US); Jess A. Cuevas, Scottsdale, AZ (US); Dean M. Esterberg, Tempe, AZ (US); Bryan W. Shirk, Mesa, AZ (US)

(73) Assignees: **TRW Inc.; TRW Vehicle Safety Systems Inc.**, both of Lyndhurst, OH (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: 09/589,341

(22) Filed: Jun. 7, 2000

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/259,362, filed on Feb. 26, 1999, now Pat. No. 6,227,562, and a continuation-in-part of application No. 09/371,776, filed on Aug. 10, 1999.

(51) Int. Cl.⁷ B60R 21/22; B60R 21/26
 (52) U.S. Cl. 280/730.2; 280/737; 137/68.13;

137/71

(56) References Cited

U.S. PATENT DOCUMENTS

3,680,886 A * 8/1972 Mazelsky 280/740

3,773,351 A	*	11/1973	Catanzarite	.....	280/738
5,573,271 A		11/1996	Headley		
5,603,525 A		2/1997	Zakula		
5,709,406 A	*	1/1998	Buchanan	.....	280/737
5,794,973 A	*	8/1998	O'Loughlin et al.	.....	280/737
5,967,550 A	*	10/1999	Shirk et al.	.....	280/736
6,010,152 A	*	1/2000	Swann et al.	.....	280/736
6,010,153 A		1/2000	Halas et al.		
6,029,995 A		2/2000	Fink		
6,056,316 A	*	5/2000	Yamaji et al.	.....	280/730.2
6,062,599 A		5/2000	Forbes et al.		
6,145,876 A	*	11/2000	Hamilton et al.	.....	280/737

FOREIGN PATENT DOCUMENTS

GB 2314300 12/1997
JP 10157551 6/1998
JP 10230814 9/1998

* cited by examiner

Primary Examiner—Peter C. English

(74) *Attorney, Agent, or Firm*—Tarolli, Sundheim, Covell, Tummino & Szabo L.P.

(57)

ABSTRACT

An apparatus (10) for helping to protect an occupant of a vehicle (12) that has a side structure (16) includes an inflatable vehicle occupant protection device (14). The inflatable vehicle occupant protection device (14) is inflatable into a position between the side structure of the vehicle and a vehicle occupant. The apparatus (10) includes an inflator (22) for inflating the inflatable vehicle occupant protection device (14) and for maintaining the inflatable vehicle occupant protection device in an inflated condition for at least five seconds. The inflator (22) contains a stored inflation fluid under pressure. The inflation fluid consists essentially of helium.

23 Claims, 6 Drawing Sheets

